RTIP ID# *(required)* RIV050501

Project Description *(clearly describe project)*
Safety and operational improvements are proposed for the existing interchange of State Route 74 (SR-74) and Interstate 215 (I-215). The project consists of the construction of a new overcrossing structure to replace the existing structure, realignment and reconstruction of ramps, reconfiguration of the Fourth Street/Redlands Avenue intersection, widening of Fourth Street (SR-74) between G Street and Redlands Avenue, widening of Redlands Avenue between the I-215 and San Jacinto Avenue, and providing a ramp metering and high occupancy vehicle (HOV) preferential lane on the entrance ramps.

The new overcrossing will be constructed to the north of the existing structure and widened from 2 lanes (1 in each direction) to 8 lanes (2 through lanes in each direction and 2 left turn pockets in each direction). Redlands Avenue will be widened from 2 lanes to 4 lanes from the overcrossing to San Jacinto Ave.The Fourth Street/Redlands intersection will also be reconfigured but no new through lanes will be added. The ramps will be widened to three lanes at the Redlands Avenue intersection merging to/from 1 lane at I-215. A site plan is attached.

Type of Project *(use Table 1 on instruction sheet)*
Reconfigure existing interchange

County	**Narrative Location/Route & Postmiles**
Riverside	Existing interchange of State Route 74 (SR-74) and Interstate 215 (I-215) in the City of Perris in Riverside County. I-215 from Post Mile 25.5 to Post Mile 27.0, and State Route 74 from the intersection at G Street to I-215, and along Redlands Ave. from I-215 to the intersection with San Jacinto Road (PM 27.2 to PM 27.8). **Caltrans Projects – EA#** 464200

Lead Agency: Caltrans

Contact Person	**Phone#**	**Fax#**	**Email**
Meardey Tim	(909) 383-6480	(951)383-6938	meardey.tim@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

	Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
X					

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start		April 2006	March 2008	March 2009
End	April 2006	October 2006	October 2008	December 2010

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
The purpose of the proposed project is to accomplish the following specific objectives:

a. Correct existing local street geometric deficiencies resulting in deficient traffic operations adjacent to the interchange.
b. Improve traffic safety.
c. Meet existing need without affecting projected regional growth.
d. Maintain existing access to the auto plaza and minimize impacts to its operations.

Need:
Bridge clearance on I-215 needs to be increased from 15'-11" to required minimum of16.5'. Radii of curves on Redlands Avenue north and south of the interchange, 400 feet and 650 feet respectively, need to be increased to 850 feet for 50 mph design speed. Existing and future LOS not acceptable, project needed to provide desirable LOS on local system to accommodate additional citywide land development in future. The project is also needed to meet the goals of the Congestion Management Plan (CMP) in southern Riverside county. Additional left-turn storage is required for acceptable LOS. The length of bridge needs to be lengthened to accommodate ultimate span of I-215.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The immediate area surrounding the project consists primarily of neighborhood and community commercial uses, and residential uses. The Perris General Plan Land Use Map (attached) shows a Light Industrial/General Industrial area approximately ½ mile south of the project site, south of Ellis Avenue. Vehicles heading south from this area would likely utilize the Case Street Ramp to I-215. Vehicles heading north from this area would likely utilize the future Ellis Avenue/I-215 interchange as well as the project interchange. However, future residential development, generating primarily automobile traffic would likely keep truck percentages the same or less than existing conditions

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Data Not Available

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2030 Traffic Volumes, LOS and Truck %

	Total AADT		LOS		Trucks AADT		
Road Segment	No Project	With project	No Project	With project	No Project	With project	Truck %
4th Street (SR-74)							
Wilkerson Ave to Redlands Ave.	34,800	34,800	E	E	4,176	4,176	12.0%
Redlands Avenue (SR-74)							
4th St. to I-215	25,300	25,200	F	C	3,036	3,024	12.0%
I-215							
North of SR-74	131,600	131,600	B	B	17,371	17,371	13.2%
South of SR-74	136,100	136,100	B	B	16,060	16,060	11.8%

Sources: Volumes and LOS – I-215/SR-74 Interchange Traffic Technical Report, VRBA Technologies, July 2006 & Discussions with Erik Ruehr of VRPA Technologies. Truck % - 2004 Annual Average Daily Truck Traffic on the California State Highway System Compiled by Traffic and Vehicle Data Systems State of California Business, Transportation and Housing Agency Department of Transportation (http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/)

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Data Not Available

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

2030 Traffic Volumes, LOS and Truck %

	Total AADT		LOS		Trucks AADT		
Road Segment	No Project	With project	No Project	With project	No Project	With project	Truck %
4th Street							
East of Redlands Ave.	20,700	3,300	F	A	2,484	396	12.0%
Redlands Avenue							
I-215 to San Jacinto Ave.	27,200	27,200	F	C	3,264	3,264	12.0%

Sources: Volumes and LOS – I-215/SR-74 Interchange Traffic Technical Report, VRBA Technologies, July 2006 & Discussions with Erik Ruehr of VRPA Technologies. Truck %, 2004 Annual Average Daily Truck Traffic on the California State Highway System Compiled by Traffic and Vehicle Data Systems State of California Business, Transportation and Housing Agency Department of Transportation (http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/)

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
The project would not be expected to result in a significant redistribution of traffic. Average daily traffic volumes in the immediate vicinity of the project are not projected to change with the project. The nearest access points to I-215 are La Nuevo Road approximately 1.5 miles to the north and Case Road approximately 2.5 miles to the south. The project would not be expected to attract traffic from or redistribute traffic to either of these interchanges. Therefore, considerable traffic redistribution would not be expected.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The traffic volume tables above show that the project is not projected to considerably change average daily traffic volumes in the vicinity of the project. The volume on 4th Street east of Redlands Avenue drops dramatically because this road segment goes from being the southbound I-215 on-ramp to an access road for the car dealerships located to the south. The tables presented below show that the project will increase average travel speeds and reduce delay during the peak hours. These factors result in a reduction in particulate emissions compared to no project conditions. Without implementation of the proposed improvements, SR-74 through the interchange area is forecast to operate at deficient LOS levels. It is noted that SR-74 does not currently nor is forecast to experience traffic volumes in excess of 125,000 average daily trips (ADT). Although, the total volume of heavy truck and diesel traffic is expected to be above 8 percent of the total ADT on SR-74. The total number of heavy trucks and diesel traffic will remain below 10,000 ADT on SR-74

Based upon the information provided, the project is not expected to introduce significant amounts of diesel truck traffic and is not considered a project of significant concern per the definition contained within 40 CFR 93.123(b)(1). Thus, a less than significant impact with respect to PM2.5 and PM10 would occur.

Segment Capacity Analysis - Syncro
SR-74/4th Street/Redlands Avenue

	Existing		2030 No Project		2030 With Project	
	Avg. Speed AM/PM (mph)	LOS AM/PM	Avg. Speed AM/PM (mph)	LOS AM/PM	Avg. Speed AM/PM (mph)	LOS AM/PM
Eastbound						
G St. to Wilkerson Ave.	9.4/4.3	F/F	9.4/4.3	F/F	8.3/19.1	F/C
Wilkerson Ave. to Redlands Ave.	8.3/3.4	F/F	8.3/7.2	F/F	23.0/24.3	C/B
Redlands Ave. to I-215 SB Ramp	3.6/7.6	F/F	5.2/6.7	F/F	25.3/23.9	B/C
I-215 SB Ramp to I-215 NB Ramp	4.2/8.1	F/F	9.0/6.7	F/F	16.8/20.4	D/C
I-215 NB Ramp to San Jacinto Avenue	3.9/5.8	F/F	7.5/4.6	F/F	9.8/19.8	F/C
Westbound						
San Jacinto Ave. to I-215 NB Ramp	8.3/3.4	F/F	8.3/7.2	F/F	13.9/12.0	E/F
I-215 NB Ramp to I-215 SB Ramp	3.6/7.9	F/F	5.2/6.7	F/F	12.1/14.5	E/D
I-215 SB Ramp to Redlands Ave.	4.2/8.1	F/F	9.0/6.7	F/F	22.6/17.5	D/D
Redlands Ave. toWilkerson Ave	3.9/5.8	F/F	7.5/4.6	F/F	24.2/23.9	B/C
Wilkerson Ave. to G St.	9.0/5.9	F/F	9.0/5.9	F/F	9.4/8.7	F/F

Sources: Volumes and LOS – I-215/SR-74 Interchange Traffic Technical Report, VRBA Technologies, July 2006

Intersection Capacity Analysis - Syncro

	Existing		2030 No Project		2030 With Project	
	Avg. Delay AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM (Sec)	LOS AM/PM	Avg. Delay AM/PM (Sec)	LOS AM/PM
Intersection						
SR-74/4th St. at G St.	23.7/>80	C/F	65.2/>80	E/F	68.3/>80	E/F
SR-74/4th St. at Wilkerson Ave.	34.2/>80	D/F	10.9/>80	D/F	14.4/17.9	B/B
SR-74/4th St. at Redlands	17.6/>80	C/F	>80/>80	F/F	28.5/44.8	C/D
SR-74/Redlands Ave. at I-215 SB Ramps	5.8/2.4	B/A	>80/>80	F/F	18.2/18.2	B/B
SR-74/Redlands Ave at I-215 NB Ramps	39.7/>80	E/F	>80/>80	F/F	22.5/24.8	C/C
Redlands Ave. at San Jacinto Ave	6.0/15.0	B/D	>80/>80	F/F	22.4/34.1	C/C

An average deialy of ">80" is sown for all intersections at level of service F. At this level of service, average delays can be predicted to be above 80 seconds, but precise estimates of delay are unreliable
Sources: Volumes and LOS – I-215/SR-74 Interchange Traffic Technical Report, VRBA Technologies, July 2006

DAVID EVANS
AND ASSOCIATES INC.
800 North Haven Avenue, Suite 300
Ontario California 91764
Phone: 909.481.5750

ALTERNATIVE 2.3
bridge w=112'

SR-74 AT I-215 INTERCHANGE IMPROVEMENTS

SAN JACINTO AVE.

1 ST.

2 ND.

3 RD.

G ST.

5 TH.

6 TH.

WALKER AVE.

REDLANDS BLVD.

NEW R/W

310-100-040
310-100-041
310-100-042
310-100-006
310-100-004
310-100-005
310-070-075
310-070-076
310-081-011
310-081-010
310-081-008
310-100-048
310-100-049
310-100-050
310-100-007
310-100-008
310-100-009
310-100-019
310-100-010
310-100-018
310-100-011
310-100-017
310-100-012
310-100-016
310-100-015
310-100-014
310-100-013
310-082-014
310-082-023
310-082-031
310-082-030
310-082-026
310-082-029
310-100-045
310-100-036
310-100-037
310-100-046
310-100-030
310-090-011
310-090-009
310-100-039

McCANN STREET (VACATED)

I-215

N

City of Perris General Plan

Legend

RESIDENTIAL

- R - 20,000
- R - 10,000
- R - 8,400
- R - 7,200
- R - 6,000
- MFR - 14
- MFR - 22

COMMERCIAL

- NC/UR - Neighborhood Commercial/Urban Residential
- NC - Neighborhood Commercial
- CC - Community Commercial
- PO - Professional Office

INDUSTRIAL

- BP - Business Park
- LI - Light Industrial
- GI - General Industrial

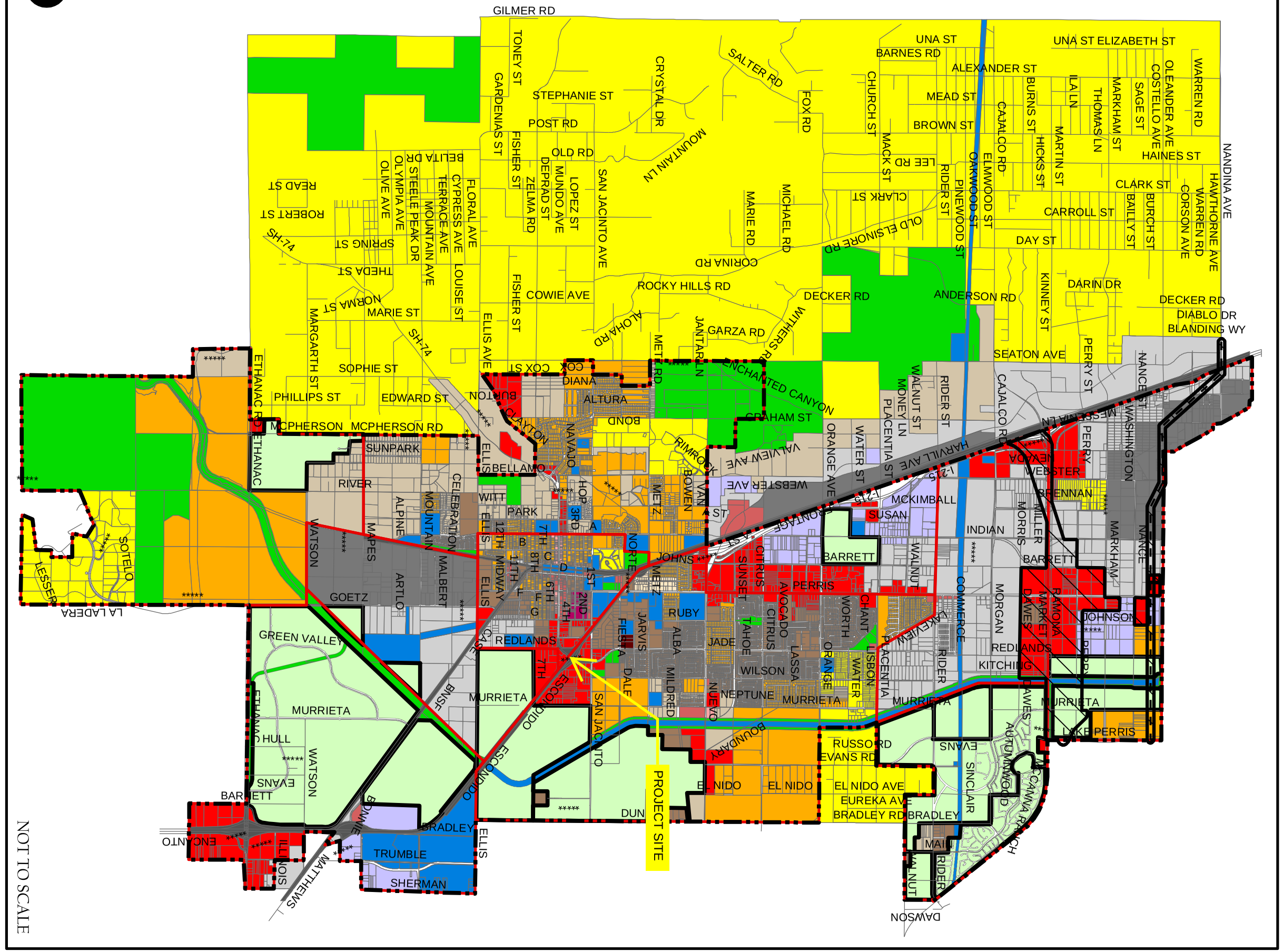
OTHER DESIGNATIONS

- SP - Specific Plan
- OS - Parks/ Recreational/ Natural Open Space
- P - Public/ Semi-Public Facilities/ Utilities
- SSA - Special Study Overlay
- City Boundary

Land Use Map

Land Use Designations

26, April 2005
City Council Approved



NOT TO SCALE